

Statewide Transportation Operations Center (STOC) Operations First Annual Report

Fiscal Year 2020

(October 1, 2019 to September 30, 2020)



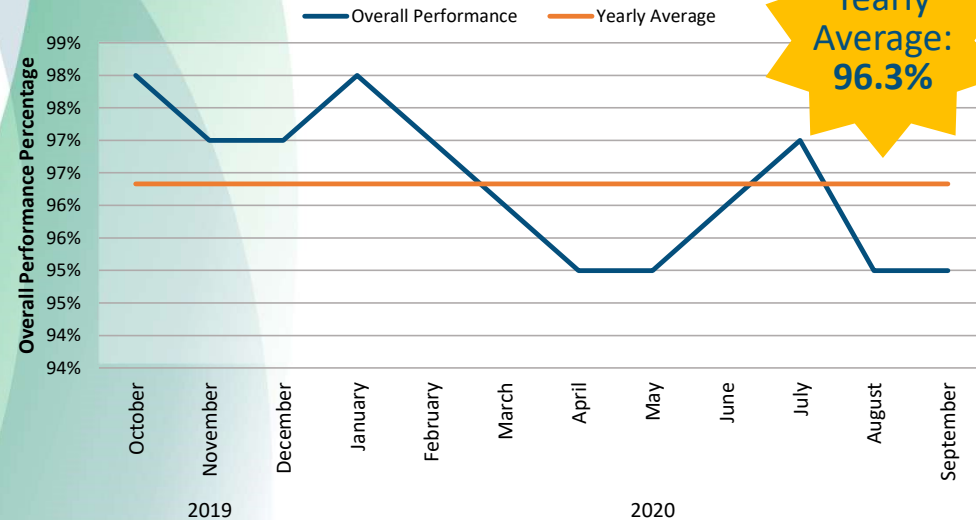
Photo: Statewide Transportation Operations Center (STOC) Control Room



Overall Performance

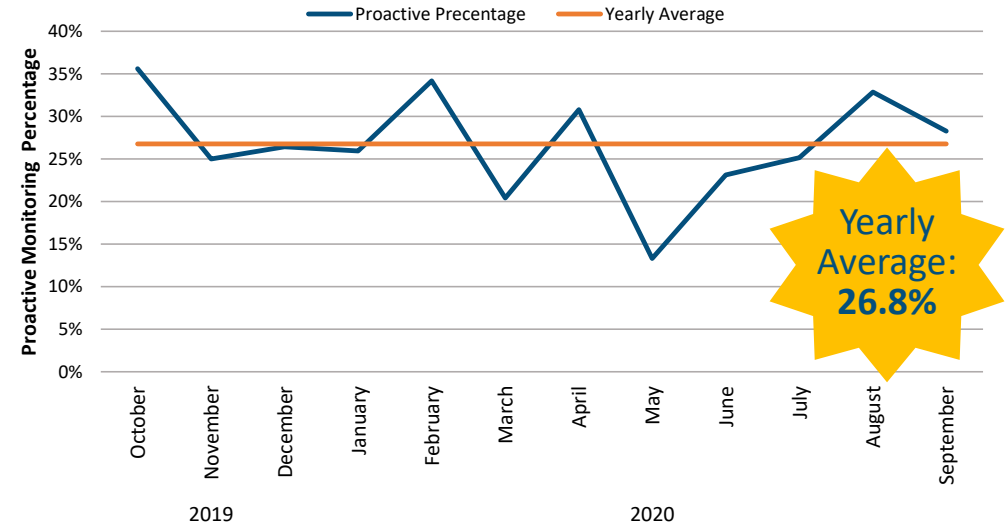
During Fiscal Year (FY) 2020, which spans from Oct. 1, 2019, through Sept. 30, 2020, MDOT's Statewide Transportation Operations Center (STOC) continued its emphasis on communication, coordination, information dissemination, and data collection. Although this fiscal year has been challenged with the COVID-19 pandemic, STOC has sustained a focus on these objectives, while being dedicated to a culture to proactively focus on operations. Due to the pandemic, STOC quickly transitioned to working in a remote operations environment on April 1, 2020 and have continued to provide the same level of services for all stakeholders.

Overall Performance - FY 2020



The overall performance of the STOC is derived from daily audits that reflect activities performed by the control room operators such as posting events to ATMS in a timely manner, accuracy, notifications sent, etc. The results of these audits are combined and averaged to represent an overall performance score for these activities. The first chart reflects the overall performance score by month throughout the fiscal year.

Proactive Monitoring - FY 2020



Proactive monitoring reflects the average percentage of incidents that were proactively identified by the control room operators utilizing tools such as traffic cameras, microwave vehicle detection sensors (MVDS), as well as other ITS devices or Internet tools such as Google Maps and stakeholder websites. The second chart reflects the average proactive monitoring score for each month throughout the fiscal year.



Control Room Activity Review

88%



Incident Closure
Email Sent within
8 minutes

97%



Incident Opening
Email Sent within
5 minutes

91%



4 – hour Incident
Update Email
Sent

98%



Incident Posted
to ATMS within 8
minutes

97%



Incident Removed
from ATMS within
5 minutes

99%



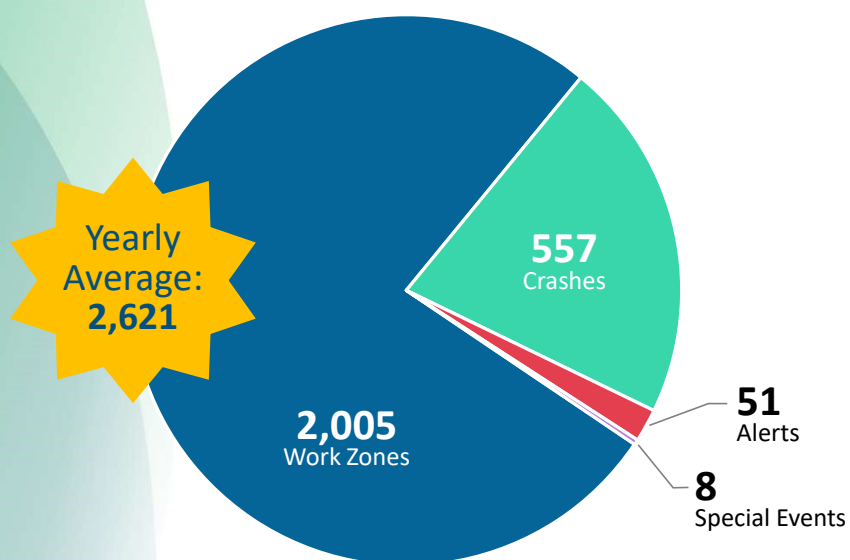
First Responder
Notification of
Incident Made

STOC Performance control room activity review is based on twelve months of audit report activities computed into an annual average for each category. The table above reflects the measures and is listed with the percentage of time in which the measure was met.



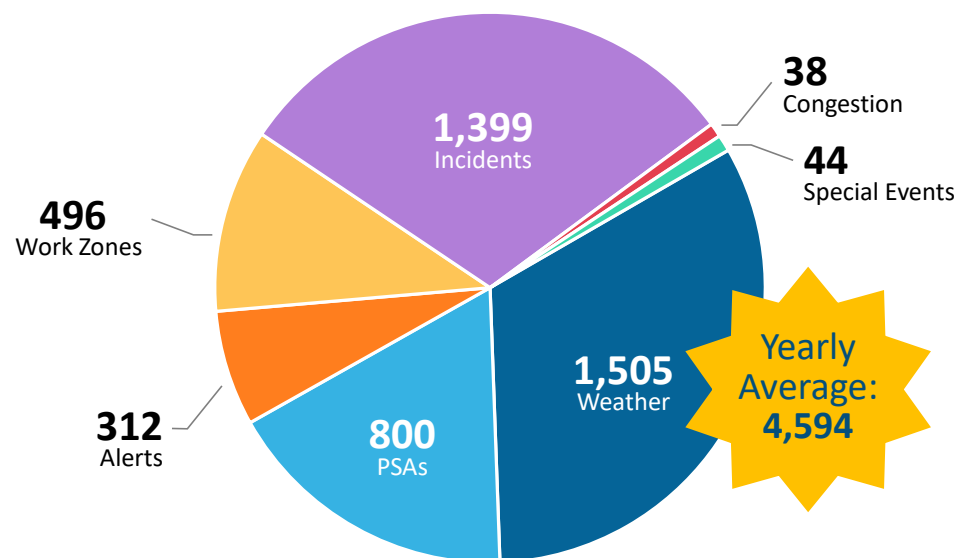
Incident Management

Incident Event Counts



Incident Management is a core function for STOC. The STOC managed a fiscal year 2020 total of 2,621 incidents. The chart above displays the incidents by specific types in which the control room operator was involved.

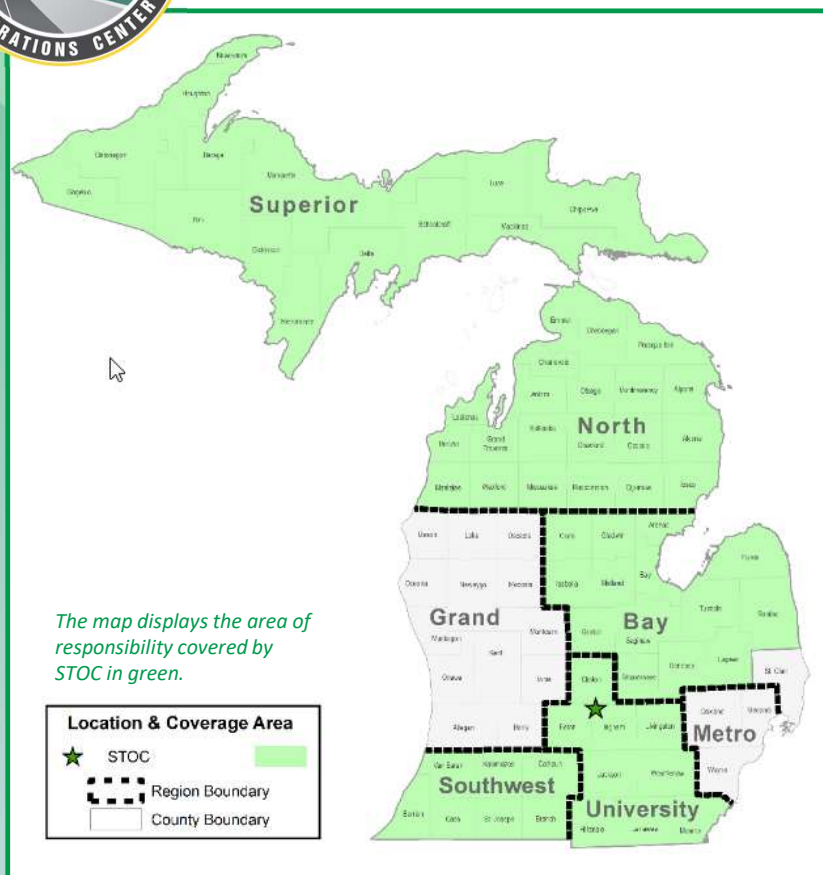
Unique DMS Messages



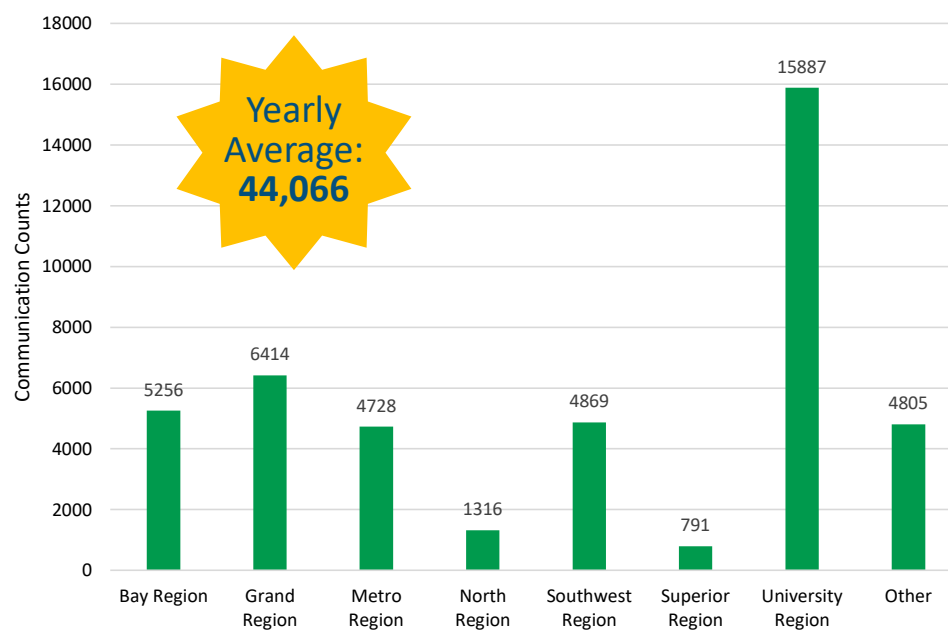
Unique messages sent to Dynamic Message Signs (DMS) are broken down into the categories as shown in the above chart. Control room operators generated 4,594 unique messages during fiscal year 2020. Note: Unique messages do not include travel time messages. The chart above shows the unique messages by specific type.



STOC Communications by Region



Communication - FY 2020



A communication is a phone call, e-mail or radio transmission into or out of the control room. University Region is responsible for both the Freeway Courtesy Patrol (FCP) and the US-23 Flex Route, which results in additional communications with STOC.

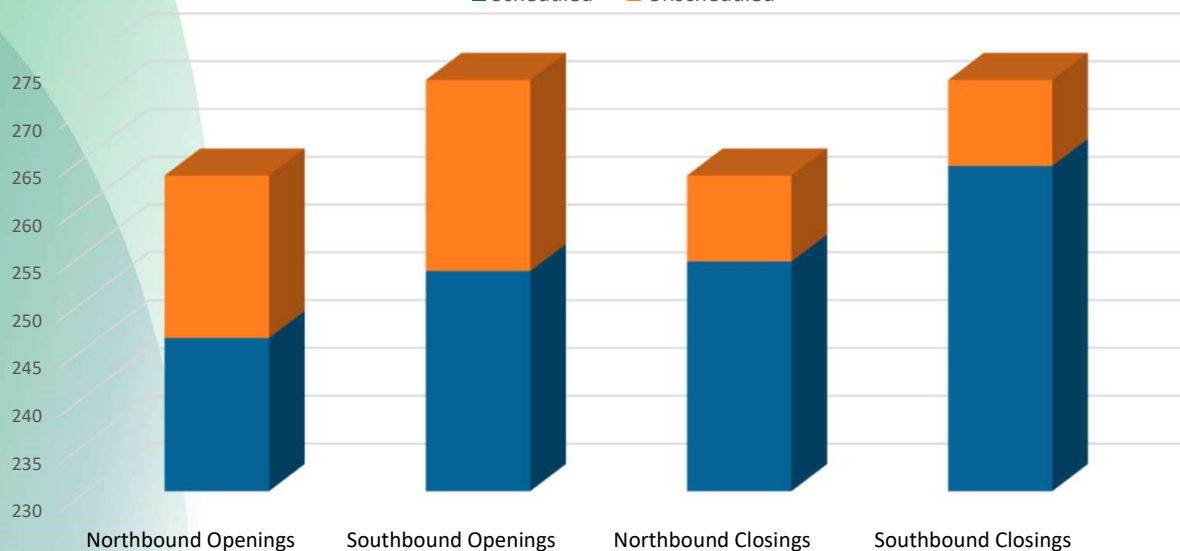
Note: 'Other' includes citizens and other state agencies.



Active Traffic Management (ATM)

Flex Route Openings & Closings

■ Scheduled ■ Unscheduled



The chart shows the number of scheduled and unscheduled opening and closing times. During these times, an ATM Specialist is monitoring the route with traffic cameras and communicating with Freeway Courtesy Patrol (FCP) to ensure that the route is safe to open for operations or clear to close down operations. There are a variety of reasons that may cause the route to open early or late and close early or late such as weather, construction, special events, equipment issues, disabled vehicles or incidents. The ATM Specialist is ready to respond to any event that occurs on the route.

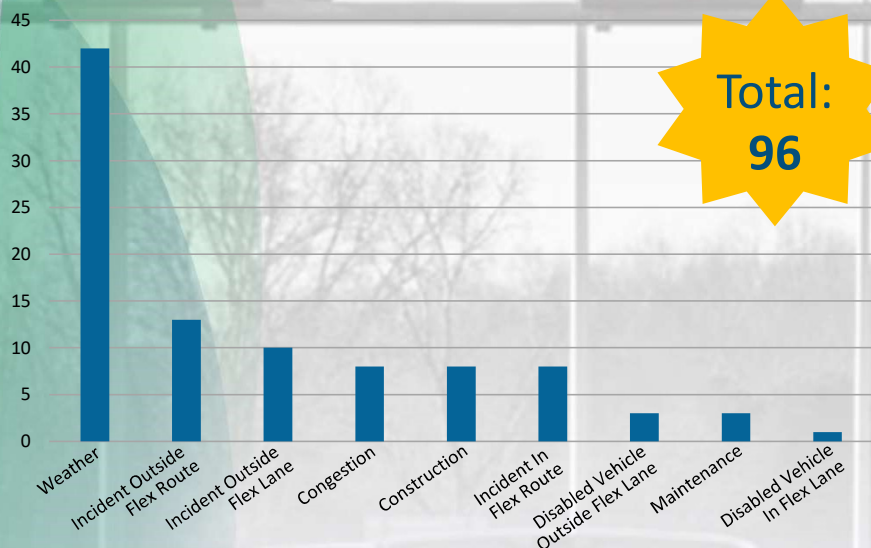




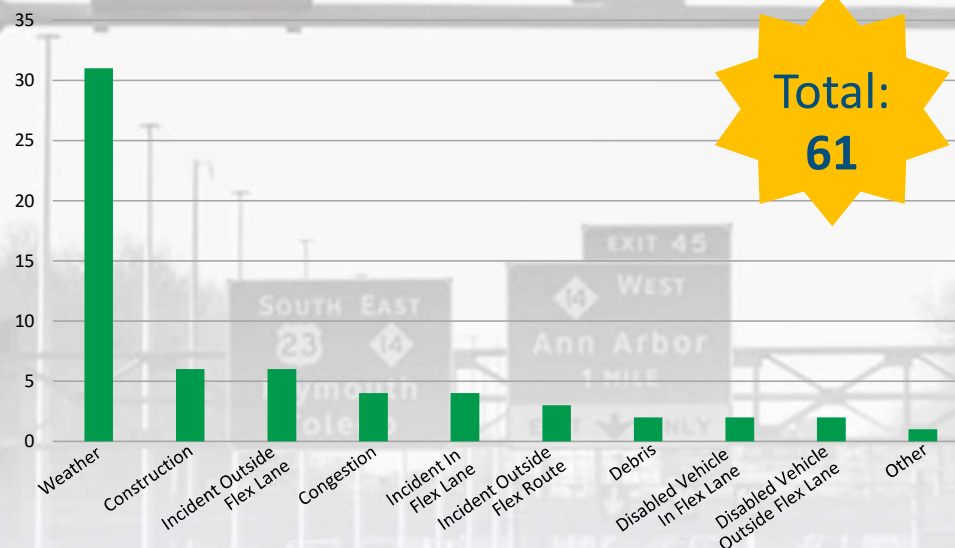
Active Traffic Management (ATM)

VSA/Gantry Utilization

Northbound Gantry Utilization



Southbound Gantry Utilization



The VSA/Gantry Utilization charts represent the number of times that the gantries were used during specific events that impacted the US-23 Flex Route and the causes during the fiscal year 2020 for northbound and southbound gantries. STOC ATM Specialist were responsible to post unique messages for each event. A weather event may impact the entire flex route using all the gantries, while a debris event may only use a few gantries. The ATM Specialist monitors the entire flex route while it is open for operation.



Freeway Courtesy Patrol (FCP) Activity

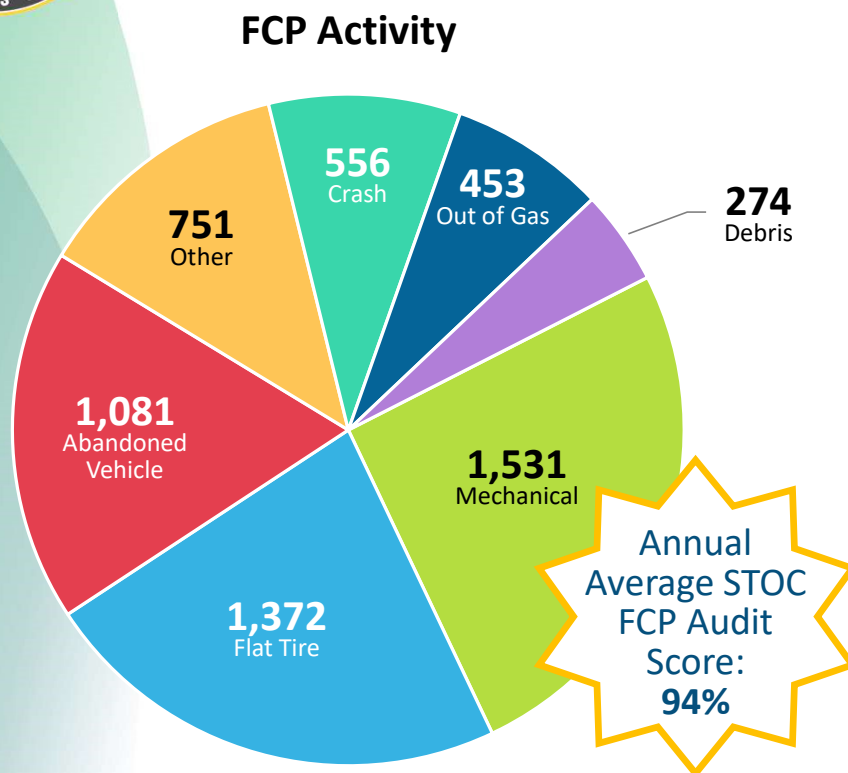


Photo: FCP van and fire truck at the scene of an incident with traffic congestion.

STOC coordinates with the FCP drivers daily. Control room operators are audited on their ability to capture accurate information from the FCP drivers. The annual average is the result of the total monthly team scores for the year and averaged for fiscal year 2020.

Total Annual Activities: 6,018